

Notice of Allowability

Application No.

10/001,371

Examiner

Eric Keasel

Applicant(s)

GOSIS ET AL.

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE, filed April 14, 2004.
2. ☒ The allowed claim(s) is/are 7-12, 14-16 and 22-30.
3. ☒ The drawings filed on 12 March 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date Feb 27, 2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT AND REASONS FOR ALLOWANCE

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 29, 2004 has been entered.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on February 27, 2004 contains a reference already of record. The examiner has deleted the duplicate reference.

Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Donovan on June 22, 2004.

The application has been amended as follows:

Art Unit: 3754

Claims 1-6 (cancelled)

Claim 7. (previously presented) A valve assembly comprising:

a valve body having a passage defining a first axis, and a bore defining a second axis disposed in crossing relation to the first axis, the bore having an inner surface defined by an inner periphery thereof, a first open end, and a second spaced apart open end; and

a valve structure including a pair of radial flanges disposed at opposed ends with a solid web member extending therebetween, the radial flanges being configured to mount the valve structure within the bore for rotation about the second axis between a closed position, wherein the valve structure cooperates with the inner surface of the bore to obstruct movement of product through the passage, and an open position, wherein the valve structure is positioned relative to the inner surface of the bore so as to permit product movement through the passage, the radial flanges being structured and arranged so as to close the first and second open ends of the bore, wherein the valve structure includes a seal structure having a first seal portion extending lengthwise on one side of the web member and generally parallel to the axis of rotation of the valve structure, a second seal portion extending lengthwise on an opposite side of the web member and generally parallel to the axis of rotation of the valve structure, a third seal portion extending around one of the radial flanges, and a fourth seal portion extending around the other radial flange, thereby creating a seal between the valve structure and the bore to prevent movement of product therepast when the valve structure is in the closed position.

Art Unit: 3754

Claim 8. (original) A valve assembly according to claim 7, wherein the web member is generally rectangular in shape.

Claim 9. (original) A valve assembly according to claim 7, wherein a diameter of the bore is substantially equal to or greater than a distance measured across that portion of the passage which the valve structure is adapted to close.

Claim 10. (original) A valve assembly according to claim 7, wherein the second axis is generally coplanar with and normal to the first axis.

Claim 11 (currently amended) A valve assembly according to claim 7, wherein the valve structure includes a the seal structure extending lengthwise of and generally parallel to the axis of rotation of the valve structure, such that when the valve structure is in the closed position, the valve structure and the bore create a straight line seal therebetween so that a force created between the seal structure and the bore along the seal line does not substantially increase or vary as the seal structure rotates between the open and closed positions, thereby enhancing ergonomic operation of the valve structure.

Claim 12 (original) A valve assembly according to claim 11, wherein the seal structure applies a wiping action to the cooperative inner surface of the bore as the valve structure moves between the open and closed positions.

Art Unit: 3754

Claim 13. (cancelled)

Claim 14. (previously presented) A valve assembly according to claim 7, wherein the web member and flanges each include an appropriate slot adapted to receive the respective seal portion.

Claim 15. (previously presented) A valve assembly according to claim 7, wherein the seal structure is made of a single piece of material.

Claim 16. (previously presented) A valve assembly according to claim 7, wherein the seal structure is an elastomeric seal.

Claim 17-21 (cancelled)

Claim 22. (currently amended) A valve assembly for use with a product holding container, the valve assembly comprising:

a one-piece valve body having a generally cylindrical passage defining a first axis, a smooth inner surface, an inlet end, and an outlet end, and a generally cylindrical bore defining a second axis arranged generally coplanar with and normal to the first axis and between the inlet and outlet end of the passage, the bore having an inner surface defined by an inner periphery, a first open end, and a second spaced apart open end, the valve body further having a pair of

Art Unit: 3754

spaced apart cylindrical seats axially aligned relative to each other and which open to opposed sides of the valve body;

a valve structure including a pair of radial flanges disposed at opposite ends with a generally rectangular solid web member extending therebetween, and a seal structure extending lengthwise of and generally parallel to opposite sides of the web member, the radial flanges being configured to mount the valve structure within the bore so as to close the first and second open ends of the bore and to cooperate with the cylindrical seats on the valve body to support the valve structure for rotation about the second axis between a closed position, wherein the seal structure cooperates with the bore to obstruct movement of product through the passage, and an open position, wherein the valve structure cooperates with the bore to permit product movement through the passage, ~~the smooth inner surface of the passage being structured and arranged in such a manner so as to provide an unobstructed path along the smooth inner surface for the product moving therethrough when the valve is positioned in the open position; and~~

wherein a diameter of the bore, as well as the distance between the cylindrical seats, is equal to or greater than a distance measured between any two diametrically opposed locations on a marginal edge of the passage.

Claim 23. (original) A valve assembly according to claim 22, wherein the product holding container is a liquid container having an outer container in surrounding relation to an inner container, and wherein the valve body includes an outer flange member adapted to facilitate attachment of the valve body to the inner container.

Art Unit: 3754

Claim 24. (original) A valve assembly according to claim 22, wherein the seal structure has a first seal portion extending lengthwise on one side of the web member and generally parallel to the axis of rotation of the valve structure, a second seal portion extending lengthwise on an opposite side of the web member and generally parallel to the axis of rotation of the valve structure, a third seal portion extending around one of the radial flanges, and a fourth seal portion extending around the other radial flange, thereby creating a seal between the valve structure and the bore to prevent movement of product therepast when the valve structure is in the closed position.

Claim 25. (original) A valve assembly according to claim 24, wherein the web member and flanges each include an appropriate slot adapted to receive the respective seal portion.

Claim 26. (original) A valve assembly according to claim 24, wherein the seal structure is made of a single piece of material.

Claim 27. (original) A valve assembly according to claim 24, wherein the seal structure is an elastomeric seal.

Claim 28. (original) A valve assembly according to claim 22, wherein the valve body and the valve structure are each made of a nylon material.

Art Unit: 3754

Claim 29. (original) A valve assembly according to claim 22, further including stops for limiting movement of the valve structure between the open and closed positions.

Claim 30. (original) A valve assembly according to claim 22, further comprising a rotation assistance device positioned on one end of one of the flanges to allow the valve structure to be rotated between the open and closed positions.

4. The following is an examiner's statement of reasons for allowance:

Although similar seal structure is known in similar rotary valves (e.g. An), this particular valve and seal structure in a bore open on both sides, in combination with the other recited limitations is not disclosed or suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260. The examiner can normally be reached on Monday-Friday.

Art Unit: 3754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric Keasel 23 JUN 04

Eric Keasel
Examiner
Art Unit 3754